

RECEIVED
CENTRAL FAX CENTER

FEB 21 2006

10/779,523

PAGE 1 OF 11

ANTHONY LLOYD APPLICATION NUMBER 10/779,623

Mr. Benjamin H. Layno,
Primary examiner
Art unit 3711

Dear Mr. Layno,

Thank you for the complete analysis of my Mathematical Problem solving game submission.

Your points related to the card display rejections are accepted and I have replaced the card display feature with a "Game control box" to eliminate the playing card function this required considerable text change (Removed text bracketed) and added text below and underlined the game features remain identical and just the means of displaying the random numbers have changed.

Unfortunately my original submission did not fully portray the uniqueness of the mathematical game, clarification has been added to the submission that required descriptive changes without any change of substance and claims,

I have studied the prior art cited in your rejection, but other than the playing card feature I only see no violations related to this present submission. The filed format rules that I have invented I consider to be totally unique, I am proposing the market name of "Triple Solution" perhaps my poor submission did indicate a connection to prior art, but after reading this submission I feel confident that you will agree that I have not infringed on prior art and in particular not the prior art of Mr. Moore or Mr. Gulag. This is a totally unique fun game, I just hope that my submission illustrates that.

Yours truly,

Anthony Lloyd

p.s. it has been a busy weekend

BEST AVAILABLE COPY

H. LAYNO
ART UNIT 3781

10/779,523

Patent changes indicated by adding underlined and **bold**
Removing indicated by brackets.

Mathematical problem solving game

Abstract of the disclosure

In accordance with the present invention, a mathematical problem solving game, has a specialized deck of cards, each card having an upper face providing a display of mathematical questions. (The cards are above the other and coded to indicate their required skill level, each) game card will randomly display the solution number and four calculation numbers that must be used to form two questions having answers that conform a third question with a final answer equal to the (underlined) displayed solution number. (of the displayed question). A simple example: calculation numbers 2, 4, 1, 3 Solution number =2. to create a correct answer from two numbers $2-1=1$ $4-3=1$ use the two answers to form one question 1+1 equal to the displayed solution number =2. to initiate the game the game control block shows the first and (second) cards displayed for players to review the four calculation numbers and solution number. players each named by being the first to declare a (required) correct answer or the first to correctly declare the solution Impossible, and lose points by calling an incorrect answer or incorrectly calling "No solution".

FIELD OF THE INVENTION

The present invention relates to a (mathematical) skill level mathematical problem solving game and more particularly to a game that has unlimited players competing to be the first to solve a (mathematical) question, rules of the game provide means of scoring points and strategies for maximizing the points earned. A specialized deck of cards has questions displayed on each individual playing card face, each of the said questions being identified to game box indicates (the) skill levels (required to) that can be used to formulate the correct answer. This deck will level playing cards a capability for players of a variety of skill levels to (compete) play the game. (While the present

10/779523

H. DAYNO
ART UNIT 374

invention relates to a deck of cards, it also embraces such a game that is adaptable to game boards, random number selection devices and computers.)

BACKGROUND OF THE INVENTION

We are repeatedly reminded of how computers are detracting from the mathematical skill levels of society as a whole and children in particular, thus there is a need for an engaging and competitive card game (which) that also enhances mathematical skills.

With respect to educational (card) games, up to the present time, players have been forced to games that have not been structured to increase mathematical skills (a specialized card deck.) In general, educational (card) games are limited to following types:

1. Memory retention games. These are limited to developing the memory.
2. Games that reward for identifying word meanings. This is excellent for language enhancement but fails to enhance mathematical skills.
3. Games that involve the use of numbers on the cards to make a decision related to the operation used to play. These are excellent for addition or subtraction but are limited in true mathematical skill development.
4. Games that require mathematical calculations with the use of standard playing cards. However, they lack the structure and competitive aspects of using the specialized game boards (playing cards) of the subject of the present invention.

Educational card games are well known in the prior art, of particular reference to the present invention are as follows: U.S. Pat. 2003234 of Friedman Shomo Ravene issued Dec 25 2003. Specifically designed to teach young children an alphabet or other basic skills.

H. L. ...
ART ...

10/30/95

H. K. R. 10/30/95
ART. 10/30/95

The said mathematical game is started by a player choosing the same control box to exercise the display of four calculation numbers and gaining a die to display a single solution number (a single die being placed face up), and then placing the said same control box face up in a location that simultaneously displays the aforementioned mathematical questions to all game players, (an unlimited number of) some of whom can earn points by being the first player to solve the question (identified by a pre-determined skill level code) using a pre-established fixed format.

(Players may sit on both sides of the device to obtain optimum orientation related to the displayed)

Each mathematical question is in a fixed format of four calculation numbers on dice positions (underlined) solution number displayed by a pointer, whereby the four calculation numbers must be divided into two (sums) questions incorporating each of the four calculated numbers just once, having answers that can be combined to form a third (sum) solution comprising an answer that equals the solution number of the displayed mathematical question.

Addition, subtraction, division and multiplication may be required to generate said correct answer.

(To increase fun) ~~Erasmus and his wife~~ a percentage of questions not having a possible solution a (valid) declaration of "No solution possible" can be made by a player with the result that remaining players will be forced to find a correct solution.

Players will be awarded points for the following:

1. The first player to declare "Solved it" and provide a correct solution
2. For correctly declaring "No solution possible"
3. For correctly calling "Solved it" after a "No solution possible" has been declared. (Should a player declare "Solved it" and fail to provide a correct answer, remaining players will be awarded a point.) A timing device (may be) is used to limit the time available to provide a solution (and an answer.) Thus the requirement for a competitive and fun game has been met.

10/779,523

10/779,523
10/779,523**Amended DETAILED DESCRIPTION OF THE INVENTION**

A mathematical problem solving game requiring players to solve arithmetic problems using a fixed format that requires calculations to form two questions whereby the answers to the first mentioned two questions are added together into a third question having an answer equaling the correct solution as displayed.

With respect to Fig. 1 An enclosed game control box (1) stores a plurality of numbered discs (2) and initiates each mathematical problem solving game. A player chooses the game control box (1) as shown. The numbered discs (2) to enter the game control box (1) display window (3) by passing by an access device (4) located at the base of a numbered disc (2) storage compartment (5) thus the numbered discs (2) are randomly selected and displayed in the game control box (1) window display compartment (3).

With respect to Fig. 2 For the function of selecting a solution number (6) located on the face of the game control box (2) is a dial face (7) player is instructed to spin the dial face (7) counter clockwise to select a solution number (9) for lower skill levels the inner dial face (7) number (9) will be selected as the solution number (6) for higher skill levels the outer dial face number (10) selected.

Illustrated are a selection of four solution numbers 7, 3, 5, 9 and a solution number 26. A correct answer to this problem is "solution is not possible".

Fig. 2a Illustrates the solving of the unique mathematical problem as the manufacturer requires required by mathematical problem solving game rules of using each of the four calculators available first once to create two questions, then the answers to that and then formed into a third question having a correct answer that equals the solution number 20.

Fig. 3 Illustrates a sand timer (11) used by the act of inverting the sand timer (11) in order to determine the conclusion of a fixed time period. The sand timer (11) is then ready for use a second (12) time.

7/779,523

4/20/07
APR 20 2007

comprosed during game control box storage and capable to cause the timer (10) to provide the time across when a scoring slide (13) is moved from above the sand timer. (10)

ORIGINAL TEST PRIOR TO DEPOSIT

(With respect to Figure 1. (Specified playing cards each display within the scope of the present invention, unique mathematical questions consisting of four calculation numbers (2) and one calculated solution number (4) with skill levels required to solve the unique mathematical questions (2) complete solution (5)(6), being numerically identified as a skill level (7)(8)(9)(10)).

With respect to Figure 1.

With respect to Fig. 2 The function of selecting a solution number Players are required to solve the unique mathematical questions (2) by creating two sums (5) each of the two sums (5) to consist of two numbers in a manner that utilizes each of the four calculation numbers (3) in single time, with the object that the resulting answers of the two sums (5) can be summed into a third two number sum (6) whereby the answer to the third two number sum (6) equals the calculated solution number (4).

1/8

The level of skill required to solve the unique mathematical question increase when progressively as the skill level numbers increase. Skill level 1 (7) unique mathematical questions (2) are of a high simple nature.)

Per example illustrated, both the solution number and the calculation numbers are randomly chosen when by the dealer shaking the (1) game control box Fig 2 (Skill level 1). Calculation numbers (2) 6,5,12,3, solution number 10 displayed. For correct answer formulation, two sums are created from the calculation numbers $6-5=1$ $12-3=9$ having answers that form a question $1+9=10$ having an answer equal to the solution number 10. And the random calculation numbers remained the same and the

10/17/05 5:23

10/17/05 5:23

calculation number changed to 6, 5, 12, 3, 5 and the correct solution $6 \times 5 = 30$ $12 \times 3 = 36$ $36 \div 5 = 7.2$

(($(3 + 1 \times 4) (5)$) the two) answers of the two operations (sums) (5) are then used to create a third question (sum) $9 + 1 = 10$ initiate the game. Next question (2) answer being $4 + 2 = 6$ (5) $6 \div 1 = 6$ (5) $6 \div 4 = 1.5$ (5)

Per example illustrated in skill level 2, (3) Calculation numbers (3) 6, 3, 8, 4 Solution number (4) 6-6 The complete unique mathematical question (2) answer being $6/3 = 2$ (5) $8 \div 4 = 2$ (5) $2 \times 2 = 4$ (5)

Per example illustrated in skill level 3 (3) Calculation numbers (3) 1, 4, 7, 2 Solution number (4) 4 the complete unique mathematical question (2) answer being $3 \times 1 = 3$ (5) $7 - 4 = 3$ (5) $6 \div 3 = 2$ (5)

Skill level 4 (10) Calculation numbers (3) 1, 3, 6, 14, 2 Solution number (4) 2, 4 The complete mathematical question (2) answer being $13 + 1 = 14$ (5) $6/2 = 3$ (5) $27 - 3 = 24$ (6)

A player, upon solving the unique mathematical question (2) will first declare "Correct" then declare the unique mathematical question (2) complete solution (3)(6) In the event of a player's incorrect answers being possible, all correct answers will be acceptable.

The embodiments of the invention in which an exclusive property or privilege is claimed are as follows:
Mathematical Problem Solving Game with a fixed format problem-solving solution, comprising using the calculation numbers displayed by the game to forming 3 questions to produce a final answer used to the solution number displayed three times in order as follows:

1. A mathematical problem solving game, comprising a game control box displaying three numbered discs and a pointer means which selects one disc to a solution number for the answer of formulae a fixed format mathematical problem solution involves the forming of three questions.

of a solution with a fixed format solution involving three parts)

10/779523

10/779523

2. A Mathematical Problem Solving Game of claim 1 wherein the awarding of a scoring point is subject to the following rules: a rule that requires players to preselect the level of difficulty, as indicated by a ~~card number~~ (coding) located on the ~~game control box~~ (specialized card) of claim 1;

a rule that multiplication, division, subtraction and addition may be required in the solving of the displayed (unique) mathematical question;

a rule that requires that (a single card from the deck of specialized cards of claim 1 be placed face up in view of an unlimited number of players at the start of the mathematical problem solving game of claim 1 by shaking the game control box of claim 1 to randomly select 5 numbers consisting of 4 calculation numbers and 1 solution number displayed in a fixed format;

a rule that a fixed format of four calculation numbers be used and used to form two sums and two questions having answers that can be formed into one calculation question by the said calculation sum to the (and one) solution number displayed (as a unique mathematical question on a specialized card from the deck of specialized cards of claim 1 to create two sums, each of the said two sums to consist of two numbers and a number that utilizes each of the four calculation numbers at the same time, with the object being that the resulting answers to the said two sums being such that they can be formed into a third sum to provide the correct solution to the unique mathematical question displayed, whereby the said third sum answer equals the solution number provided in the associated unique mathematical question.)

(a rule that establishes that questions displayed on a specialized card from the specialized deck of claim 1, be of an identified variety of skill levels.)

10/7/95 5210 3

MAE-100
MAE-100 574

a rule permitting a questions displayed on the game controller (specialized cards) of which the user

have a solution, for purpose of establishing first to declare "no possible solution"

a rule that appropriately rewards with points the first player to either, identify a solution, or declare

identify "no possible solution" or identify a solution after "no solution has been declared".

(a rule that awards double points to a player that identifies a solution after a "no possible solution" has been declared by another competing player.)

(a rule that if a player fails to declare a possible solution following a declaration of "no solution" the remaining players are awarded points.)

a rule permitting a timing device to limit the time available to solve a unique mathematical question